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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,492	02/08/2007	Anniina Pouru	019075-00069	4721

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EXAMINER	
MCCLAIN-COLEMAN, TYNESHA L.	

ART UNIT	PAPER NUMBER
1784	

NOTIFICATION DATE	DELIVERY MODE
04/15/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com
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Office Action Summary	Application No.	Applicant(s)	
	10/530,492	POURU ET AL.	
	Examiner	Art Unit	
	TYNESHA MCCLAIN-COLEMAN	1784	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on December 15, 2009 is acknowledged. Claims 1-14 are pending in the application.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wester et al.* WO02/082929 (hereinafter "*Wester*").

6. With respect to claims 1, 4, 10, 11, and 14, *Wester* discloses incorporating fatty acid esters of plant sterols into food products such as breakfast cereals (page 5, lines 24-27 and page 6, lines 2-4). The term plant sterol refers to both sterols and saturated sterols i.e. stanols either in their free form or esterified with e.g. fatty acids (page 5, lines 3-4). One example of the composition included fruit muesli containing stanol ester and β-glucan (Example 12, page 20). The fruit muesli contained 2.5g of plant sterol ester, and the total weight of the composition was 60g (including the oat flakes, oat bran concentrate, plant stanol ester, oat bran, sugar, rice crispy, vegetable oil, syrup, salt, and fruit mixture). Thus, the product contained about 4.17 weight percent of plant stanol ester, which falls within the claimed range.

7. However, *Wester* does not disclose at least 50% (claim 1), 70% (claim 12), or 90% (claim 13) of the breakfast cereal is puffed and/or extruded.

8. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the amount of plant sterol esters disclosed by *Wester* into cereal that is 100% puffed and/or extruded.

9. One having ordinary skill in the art would have been motivated to do this because *Wester* teaches 4.17 weight percent of plant sterol esters are present in fruit muesli, which contains rice crispy cereal pieces (Example 12, page 20). It is well known in the art that rice crispy cereal pieces are puffed. *Wester* also teaches cereal products, including breakfast cereals as well as mueslis, may contain the 0.4% - 10% of plant

sterol esters (page 6, lines 2-4 and page 9, lines 9-11). Therefore it would have been obvious, given the teachings of *Wester*, to incorporate the plant sterol esters into a variety of breakfast cereals, including puffed and extruded cereals as claimed by the applicant, with the expectation of successfully producing a breakfast cereal that lowers cholesterol levels when ingested (page 5, lines 28-30).

10. Regarding claims 2 and 5, the fruit muesli composition mentioned above also contains 6.0g of sugar. As a result, the total composition included 10% sugar by weight, which falls within the claimed range (Example 12, page 20).

11. With respect to claim 3, *Wester* discloses oat bran is present in the muesli (Example 7, page 17 and Example 12, page 20), and bran products may be toasted (page 6, lines 5-6).

12. With regard to claims 6, 12, and 13, *Wester* discloses an example of a cereal product containing β-glucan and stanol fatty acid ester (Example 7, page 17). The muesli mixture consisted of oat flake, fibre-rich oat bran, rye flake, wheat germ, brown sugar, sugar syrup, salt, apple flake, raisin, hazel nut, vegetable fat, and stanol fatty acid ester. The composition has a total mass of 990g, and the weight percent of stanol fatty acid ester present in the composition is about 2% (20g of stanol fatty acid ester was used). Since the stanol fatty acid ester is the only plant sterol ester used in this example, the plant sterol ester comprises 100 percent by weight of stanol fatty acid ester, which falls within the claimed range.

13. Regarding claim 7, *Wester* discloses preferably plant sterol fatty acid esters are incorporated into food. Even more preferred, the plant sterol fatty acid esters contains a

substantial amount of stanol fatty acid ester e.g. at least 30% stanol fatty acid ester (page 13, lines 2-4). Since *Wester* discloses at least 30% stanol fatty acid esters are present in the plant sterol composition, at most 70% of plant sterol fatty acid is present which falls within the range claimed by the applicant.

14. With respect to claim 8, the fruit muesli composition mentioned above in example 12 also contains 8.3% β-glucan, a soluable fibre, which falls within the claimed range of 3.5 to 60 weight-% of dietary fibre (Example 12, page 20).

15. Regarding claim 9, *Wester* discloses a fruit muesli composition comprising 6.0g of sugar, and the total composition included 10% sugar by weight (Example 12, page 20). However, this particular example does not disclose that the cereal comprises 17.5 to 50 weight-% sugar.

16. In another example, *Wester* discloses a muesli mixture containing β-glucan and stanol fatty acid ester (Example 7, page 17). This mixture contains 170g of sugar (100g brown sugar and 70g of sugar syrup), which is about 17.2% weight of sugar present in the mixture.

17. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the amount of sugar present in example 12. It is also obvious to consider sugar from the fruit as additional sources of sugar.

18. One having ordinary skill in the art would have been motivated to do this because *Wester* teaches various amounts of sugar may be added to the breakfast cereal. Also, the addition of sugar enhances the flavor of the cereal making it more appealing to consume.

19. It would have also been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate sugar (claims 2, 5, and 9), toasted cereal (claim 3), stanol fatty acid esters (claims 6, 12, and 13), sterol fatty acid esters (claim 7), and dietary fibre (claim 8) disclosed by *Wester* into at least 50 weight % of puffed and/or extruded cereal.

20. One having ordinary skill in the art would have been motivated to do this because *Wester* teaches sugar, stanol fatty acid esters, sterol fatty acid esters, toasted cereal, and dietary fibre are present in the fruit muesli, which contains rice crispy cereal pieces (Example 12, page 20 and Example 7, page 17). It is well known in the art that rice crispy cereal pieces are puffed. *Wester* also teaches cereal products, including breakfast cereals as well as mueslis, may contain the 0.4% - 10% of plant sterol esters and/or plant stanol esters (page 5, lines 3-8; page 6, lines 2-4; and page 9, lines 9-11) and 1-5% β-glucan (a soluable fibre) (page 9, lines 9-11). Therefore it would have been obvious, given the teachings of *Wester*, to incorporate the sugar, stanol fatty acid esters, sterol fatty acid esters, toasted cereal, and dietary fibre into a variety of breakfast cereals, including puffed and extruded cereals as claimed by the applicant, with the expectation of successfully producing a breakfast cereal that lowers cholesterol levels when ingested (page 5, lines 28-30).

21. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wester et al.* WO02/082929 (hereinafter "*Wester*") in view of *Plank et al.* US 2003/0235643 A1 (hereinafter "*Plank*").

22. With respect to claims 1, 4, 10, 11, and 14, *Wester* discloses incorporating fatty acid esters of plant sterols into food products such as breakfast cereals (page 5, lines 24-27 and page 6, lines 2-4). The term plant sterol refers to both sterols and saturated sterols i.e. stanols either in their free form or esterified with e.g. fatty acids (page 5, lines 3-4). One example of the composition included fruit muesli containing stanol ester and β-glucan (Example 12, page 20). The fruit muesli contained 2.5g of plant sterol ester, and the total weight of the composition was 60g (including the oat flakes, oat bran concentrate, plant stanol ester, oat bran, sugar, rice crispy, vegetable oil, syrup, salt, and fruit mixture). Thus, the product contained about 4.17 weight percent of plant stanol ester, which falls within the claimed range.

23. However, *Wester* does not disclose at least 50% (claim 1), 70% (claim 12), or 90% (claim 13) of the breakfast cereal is puffed and/or extruded.

24. *Plank* discloses a food intermediate containing phytosteryl esters (fatty acid derivatives of phytosterols) complex (paragraph [0002]). The complex is added to flour that is then processed to dough (paragraph [0039]). Ready to eat (RTE) cereal pieces, such as CHEERIOS® and WHEATIES® , are formed by using the dough as prepared above (paragraph [0044]). It is well known in the art that CHEERIOS® are formed by extruding and puffing dough.

25. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to prepare the breakfast cereal disclosed by *Wester* by using the method disclosed by *Plank*.

26. One having ordinary skill in the art would have been motivated to do this because *Wester* teaches cereal products, including breakfast cereals as well as mueslis, may contain the 0.4% - 10% of plant sterol esters (page 6, lines 2-4 and page 9, lines 9-11). Also, *Wester* and *Plank* teach the presence of plant sterol esters in breakfast cereals. Based upon the fact that the breakfast cereals disclosed by *Wester* and *Plank* are similar, it would have been obvious, given the teachings of *Plank*, to use the plant sterol esters disclosed by *Wester* to prepare breakfast cereal using the method disclosed by *Plank* with the expectation of successfully producing puffed and extruded breakfast cereal that lowers cholesterol levels when ingested (page 5, lines 28-30).

27. Regarding claims 2 and 5, the fruit muesli composition mentioned above also contains 6.0g of sugar. As a result, the total composition included 10% sugar by weight, which falls within the claimed range (Example 12, page 20).

28. With respect to claim 3, *Wester* discloses oat bran is present in the muesli (Example 7, page 17 and Example 12, page 20), and bran products may be toasted (page 6, lines 5-6).

29. With regards to claims 6, 12, and 13, *Wester* discloses an example of a cereal product containing β-glucan and stanol fatty acid ester (Example 7, page 17). The muesli mixture consisted of oat flake, fibre-rich oat bran, rye flake, wheat germ, brown sugar, sugar syrup, salt, apple flake, raisin, hazel nut, vegetable fat, and stanol fatty acid ester. The composition has a total mass of 990g, and the weight percent of stanol fatty acid ester present in the composition is about 2% (20g of stanol fatty acid ester was used). Since the stanol fatty acid ester is the only plant sterol ester used in this

example, the plant sterol ester comprises 100 percent by weight of stanol fatty acid ester, which falls within the claimed range.

30. Regarding claim 7, *Wester* discloses preferably plant sterol fatty acid esters are incorporated into food. Even more preferred, the plant sterol fatty acid esters contains a substantial amount of stanol fatty acid ester e.g. at least 30% stanol fatty acid ester (page 13, lines 2-4). Since *Wester* discloses at least 30% stanol fatty acid esters are present in the plant sterol composition, at most 70% of plant sterol fatty acid is present which falls within the range claimed by the applicant.

31. With respect to claim 8, the fruit muesli composition mentioned above in example 12 also contains 8.3% β-glucan, a soluable fibre, which falls within the claimed range of 3.5 to 60 weight-% of dietary fibre (Example 12, page 20).

32. Regarding claim 9, *Wester* discloses a fruit muesli composition comprising 6.0g of sugar, and the total composition included 10% sugar by weight (Example 12, page 20). However, this particular example does not disclose that the cereal comprises 17.5 to 50 weight-% sugar.

33. In another example, *Wester* discloses a muesli mixture containing β-glucan and stanol fatty acid ester (Example 7, page 17). This mixture contains 170g of sugar (100g brown sugar and 70g of sugar syrup), which is about 17.2% weight of sugar present in the mixture.

34. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the amount of sugar present in example 12. It is also obvious to consider sugar from the fruit as additional sources of sugar.

35. One having ordinary skill in the art would have been motivated to do this because *Wester* teaches various amounts of sugar may be added to the breakfast cereal. Also, the addition of sugar enhances the flavor of the cereal making it more appealing to consume.

36. It would have also been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate sugar (claims 2, 5, and 9), toasted cereal (claim 3), stanol fatty acid esters (claims 6, 12, and 13), sterol fatty acid esters (claim 7), and dietary fibre (claim 8) disclosed by *Wester* in view of *Plank* into at least 50 weight % of puffed and/or extruded cereal.

37. One having ordinary skill in the art would have been motivated to do this because *Wester* teaches sugar, stanol fatty acid esters, sterol fatty acid esters, toasted cereal, and dietary fibre are present in the fruit muesli, which contains rice crispy cereal pieces (Example 12, page 20 and Example 7, page 17). It is well known in the art that rice crispy cereal pieces are puffed. *Wester* also teaches cereal products, including breakfast cereals as well as mueslis, may contain the 0.4% - 10% of plant sterol esters and/or plant stanol esters (page 5, lines 3-8; page 6, lines 2-4; and page 9, lines 9-11) and 1-5% β-glucan (a soluable fibre) (page 9, lines 9-11). Therefore it would have been obvious, given the teachings of *Wester*, to incorporate the sugar, stanol fatty acid esters, sterol fatty acid esters, toasted cereal, and dietary fibre into a variety of breakfast cereals, including puffed and extruded cereals as claimed by the applicant, with the expectation of successfully producing a breakfast cereal that lowers cholesterol levels when ingested (page 5, lines 28-30).

Response to Arguments

38. Applicant's arguments filed on December 15, 2009 have been fully considered.

39. Applicant's amendments with respect to the rejections under 35 U.S.C. 112 and 35 U.S.C. 102(a) and 102(e) have been acknowledged, see pages 4-6 of Remarks, and the rejection of claims 1, 2, 4-10, and 11 have been withdrawn.

40. Applicant's arguments with respect to pages 4-6 (*Wester*) have been considered but they are not persuasive. Applicant argues the fruit muesli disclosed by *Wester* in Example 12 does not comprise at least 50 weight percent of puffed and/or extruded cereals. However, *Wester* discloses the fruit muesli contains rice crispy cereal pieces (Example 12, page 20). It is well known in the art that rice crispy cereal pieces are puffed. *Wester* also teaches cereal products, including breakfast cereals as well as mueslis, may contain the 0.4% - 10% of plant sterol esters (page 6, lines 2-4 and page 9, lines 9-11). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the plant sterol esters disclosed by *Wester* into a variety of breakfast cereal, including mueslis as well as puffed and/or extruded cereals.

41. Applicant's arguments with respect to page 5 (*Plank*) have been considered but they are not persuasive. Applicant argues *Plank* does not teach at least 50% of the cereal is puffed and/or extruded. However, *Plank* discloses a food intermediate containing phytosteryl esters (fatty acid derivatives of phytosterols) complex (paragraph [0002]). The complex is added to flour that is then processed to dough (paragraph

[0039]). Ready to eat (RTE) cereal pieces, such as CHEERIOS® and WHEATIES® , are formed by using the dough as prepared above (paragraph [0044]). It is well known in the art that CHEERIOS® are formed by extruding and puffing dough. Therefore, the cereal prepared by *Plank* is puffed and extruded, and it contains fatty acid derivatives of phytosterols.

42. Applicant's arguments with respect to pages 5-6 (*Plank* and *Wester* in view of *Plank*) have been fully considered but they are not persuasive. Applicant argues the plant sterol ester content in the final food product is not specifically indicated by *Plank*. Applicant also argues the complex disclosed by *Plank* comprises plant sterols and their esters that are sequestered into amylopectin/beta-glucan. Even though *Plank* fails to disclose the amount of free plant sterol esters, *Wester* and *Plank* both teach the presence of plant sterol esters in breakfast cereals. Therefore, it would be obvious to use the plant sterol esters disclosed by *Wester* to prepare breakfast cereal using the method disclosed by *Plank* with the expectation of successfully producing puffed and extruded breakfast cereal that lowers cholesterol levels when ingested (page 5, lines 28-30).

Conclusion

43. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TYNESHA MCCLAIN-COLEMAN whose telephone number is (571)270-1153. The examiner can normally be reached on Monday - Thursday 7:30AM - 5:00PM Eastern Time.

44. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571)272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

45. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TYNESHA L MCCLAIN-COLEMAN/

Examiner, Art Unit 1784

/Jennifer C. McNeil/

Supervisory Patent Examiner, Art Unit 1784